G3G180-CG01-03

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G180-CG01-03**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1770
Power consumption	W	161
Current draw	A	1.33
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

Weight	3.6 kg
Fan size	180 mm
Rotor surface	Thick-film passivated
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	PTC thermistor
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 No. 77

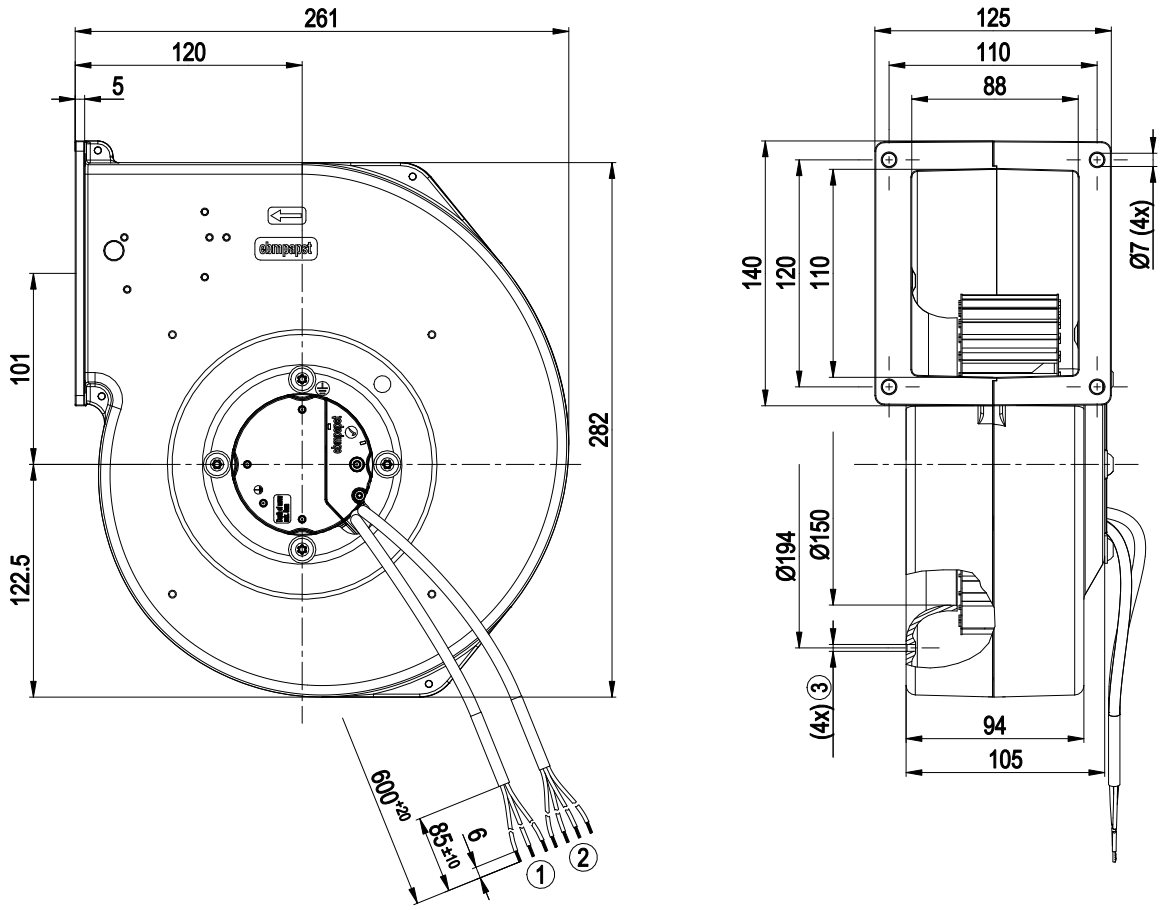
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Product drawing



1	Cable PVC 3x AWG20, 3x crimped splices
2	Cable PVC 4x AWG22, 4x crimped splices
3	Tapping hole ready for self-tapping M4 screw

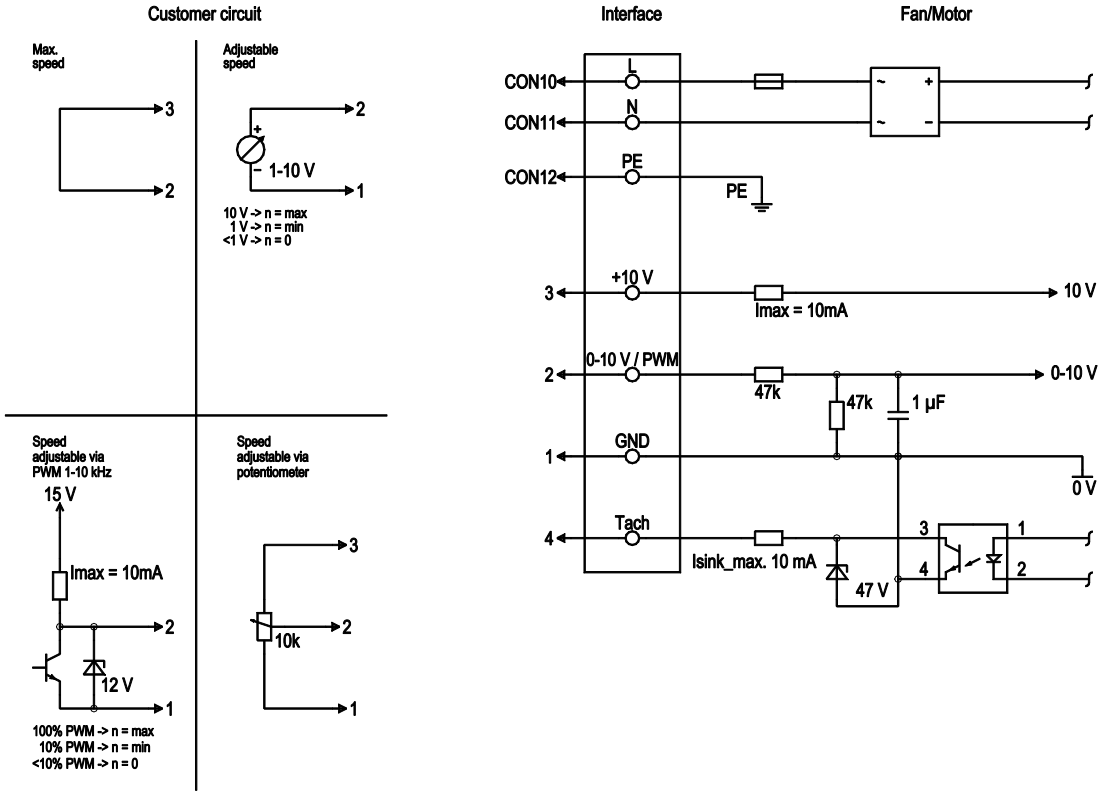
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV

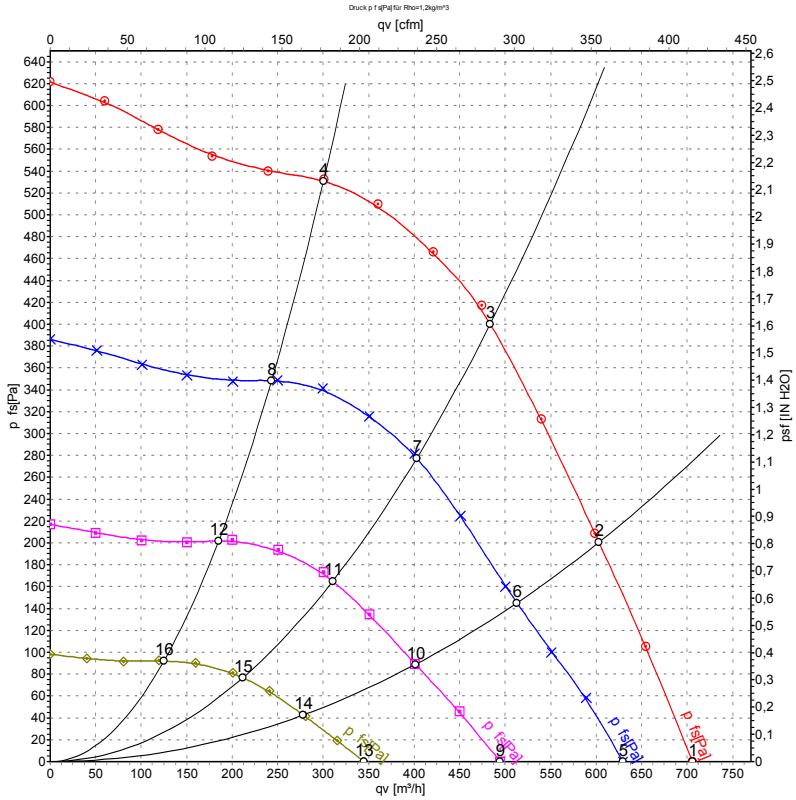
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Curves: Air performance 50 Hz



Measurement: LU-139417-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	1770	161	1.33	69	76	705	0	415	0.00
2	230	50	1950	161	1.33	68	75	605	200	355	0.80
3	230	50	2095	142	1.18	66	73	485	400	285	1.61
4	230	50	2300	105	0.90	64	71	300	530	175	2.13
5	230	50	1560	120	1.00			630	0	370	0.00
6	230	50	1660	102	0.86			515	145	300	0.58
7	230	50	1765	83	0.71			400	280	235	1.12
8	230	50	1890	56	0.50			245	349	145	1.40
9	230	50	1260	64	0.55			495	0	290	0.00
10	230	50	1320	52	0.47			400	89	235	0.36
11	230	50	1375	41	0.37			310	166	180	0.67
12	230	50	1445	29	0.26			185	202	110	0.81
13	230	50	890	24	0.21			345	0	205	0.00
14	230	50	920	19	0.17			280	43	165	0.17
15	230	50	950	16	0.15			210	77	125	0.31
16	230	50	990	12	0.13			125	92	75	0.37

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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